

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2008-0063

WASTE DISCHARGE REQUIREMENTS
FOR
WILD ROSE VINEYARDS LLC
DOLE FRESH VEGETABLES, INC.
FORMER DOLE FRESH FRUIT/VICTOR FRUIT
POST CLOSURE OPERATION AND MAINTENANCE
FORMER CLASS II SURFACE IMPOUNDMENT
SAN JOAQUIN COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. Dole Fresh Vegetables, Inc. (previous owner and operator) and Wild Rose Vineyards LLC (current land owner) (hereafter jointly Discharger) are the previous owner and current owner respectively of a closed Class II surface impoundment. The facility was previously regulated by Waste Discharge Requirements (WDRs) Order No. 5-00-012 in conformance with Title 27 of California Code of Regulations, Division 2, Subdivision 1 (hereafter Title 27). The Discharger submitted a final Surface Impoundment Closure Report on 4 November 2005 describing the final closure of the surface impoundment and triggering post closure requirements.
2. The facility is at 8751 East Highway 12 in Victor, California. This property is described by Assessor's Parcel Number 051-030-63 in the NE ¼ of Section 4, T3N, R7E, MDB&M. The site is on the north side of Highway 12 and west of Bruella Road in the City of Victor as shown on Attachment A, which is incorporated herein and made a part of this order by reference.
3. The facility consists of six-closed evaporation/percolation wastewater ponds on approximately 1.4 acres as shown on Attachment B, which is incorporated herein and made a part of this Order by reference.
4. Previously, the facility processed cherries with a sulfur dioxide/calcium chloride brine solution. When active, 21,000 gallons per day of wash water and used brine solution were discharged to the six unlined ponds. Most of the liquid waste either evaporated or infiltrated into underlying soil. The waste liquid was used intermittently to irrigate the surrounding vineyards owned by the operator.
5. In August 2005 the Discharger closed the impoundment by removing all the solids and underlying soil to a depth of four feet in two impoundments and a depth of three inches in the remaining impoundments. Prior to closing the impoundments, the Discharger demonstrated that it was infeasible to remove all the contaminated soil

beneath the impoundments. Therefore, in compliance with Title 27, the facility has been closed as a landfill. This closure includes a Title 27 compliant cover that nearly eliminates percolation of rainwater through the waste. These WDRs are written to regulate post-closure maintenance of the former Class II surface impoundments.

WASTE AND SITE CLASSIFICATION

6. From 1982 to 1992 the facility operated under WDRs Order No. 82-061, as a non-Chapter 15 facility. In 1992, the Regional Water Board adopted revised WDRs Order No. 92-154. The revised WDRs re-classified the wastes as designated waste, under the criteria in Title 23, Division 3, Chapter 15, California Code of Regulations (Chapter 15)(now recodified, in part, in Title 27 California Code of Regulations Division 2), required groundwater monitoring, and required submittal of a technical report addressing wastewater treatment proposals. Ultimately, the Discharger treated the wastewater to reduce total dissolved solids concentrations (TDS) and was allowed to continue to discharge to the unlined ponds.
7. In November 1999, Dole requested that the wastewater be re-classified as non-designated waste. In response, staff requested an investigation of the hydrology associated with the evaporation/percolation ponds. The investigation determined that soil under the ponds had been contaminated with sulfate up to 3,400 mg/kg, and chloride up to 500 mg/kg. Background sulfate and chloride concentrations in soil are approximately 120 mg/kg and 22 mg/kg, respectively. Downgradient groundwater was impacted with up to 2,400 mg/l TDS, 690 mg/l sulfate and 330 mg/l chloride. Background TDS, sulfate and chloride concentrations in groundwater are approximately 400, 40, and 10 mg/l respectively. The request was denied based on the investigation results. In January 2002, Dole submitted a closure plan for the ponds and in June 2002, Dole submitted an Engineering Feasibility Study to cleanup impacted groundwater.
8. On 8 February 2000 the Regional Water Board adopted WDRs Order No. 5-00-012 due to an ownership change from Dole to Wild Rose and an operator change from Dole to California Fruit Processors LLC, a lessee of Wild Rose. California Fruit Processors discharged fruit processing brine to the ponds for a single season in 2000.
9. Dole Fruit has accepted responsibility for closing the site because of its long-term discharge to these ponds.
10. 'Designated waste' is defined in California Water Code, §13173, as a nonhazardous waste which consists of, or contains pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in

excess of applicable water quality standards, or which could cause degradation of waters of the state.

11. The wastewater discharged to the surface impoundments posed a significant threat to water quality and in fact degraded groundwater quality. Therefore, the wastewater discharged to the impoundments was a 'designated waste' and the surface impoundments must be closed and maintained in compliance with Title 27.

SITE DESCRIPTION

12. Land uses within 1,000 feet of the facility are agriculture and residential.
13. The facility receives an average annual precipitation of 17.57 inches and a mean annual evaporation of 67.94 as measured at Lodi. Based on these data, average annual net evaporation at the facility is 50.37 inches.
14. The 1000-year, 24-hour precipitation event for this area is estimated to be 4.89 inches, based on Department of Water Resources bulletin *Rainfall Depth-Duration-Frequency for California*, revised November 1982.
15. The waste management facility is not within a 100-year flood plain based on the Federal Emergency Management Agency's (FEMA) Flood Hazard Map.

SURFACE AND GROUND WATER CONDITIONS

16. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basin, Fourth Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.
17. Surface drainage is toward Mokelumne River in the Lower Mokelumne Hydrologic Area (531.20) of the San Joaquin River Basin.
18. The designated beneficial uses of the Mokelumne River, as specified in the Basin Plan, are agricultural supply, water contact and non-contact water recreation, warm and cold fresh water habitat, preservation of rare, threatened and endangered species, and groundwater recharge.
19. The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal, agricultural, and industrial supply.
20. The first encountered groundwater is approximately 65 feet below the native ground surface. Groundwater elevations range from six feet mean sea level (msl) to thirteen

feet msl. The groundwater is unconfined. The depth to groundwater fluctuates seasonally as much as 2 feet.

21. The direction of groundwater flow is toward the south. The direction of groundwater flow varies seasonally and periodically flows toward the southeast. The average groundwater gradient is approximately 0.002 feet per foot.

GROUNDWATER MONITORING

22. The site's groundwater monitoring system consists of two background wells, MW-1 and -4; and four down-gradient monitoring wells, MW-2, -3, -5, and -6. MW-2 and -3 are detection wells located at the southwest and southeast corners, respectively, of the surface impoundment area. MW-5 and -6 are corrective action wells located 300 to 400 feet downgradient of the impoundment area and monitor migration of the contaminant plume.
23. The Discharger's detection monitoring program satisfies the requirements contained in Title 27.

SOIL AND GROUNDWATER DEGRADATION

24. Soil under the surface impoundments had been contaminated with sulfate up to 3,400 mg/kg, and chloride up to 500 mg/kg. Background sulfate and chloride concentrations in soil are approximately 120 mg/kg and 22 mg/kg, respectively. Boring results indicate that soil beneath the impoundments contains elevated concentrations of sulfate and chloride throughout the soil column, from the bottom of the surface impoundments to groundwater.
25. Downgradient groundwater has been impacted with up to 2,400 mg/l TDS, 690 mg/l sulfate and 330 mg/l chloride. Background groundwater quality has TDS ranging between 340 and 450 mg/l, chloride ranging between 7 and 19 mg/l, and sulfate ranging from 32 to 53 mg/l.

CLOSURE OF WASTE MANAGEMENT UNIT

26. To close the surface impoundments, residual wastes, including liquids, sludges, precipitates, settled solids, and some underlying soil contaminated by wastes, were removed and discharged to a waste management unit approved by Regional Water Board staff. The Discharger determined that removal of all remaining contaminated soil beneath the impoundments was infeasible and therefore the impoundments have been closed as a landfill.

27. After soil removal, confirmation samples were collected from the base of each excavation. The excavations were leveled and filled to grade with clean imported soil. The former impoundment area received a minimum 30-inch thick soil cover compacted to 90 percent of the maximum dry density. The cover was graded to achieve a minimum 2 percent slope. Vegetation was established on the cover as an erosion control measure.
28. The footprint of the closed waste management units is fenced to protect the cover from damage by farm equipment.
29. The Discharger placed deed restrictions on the property, which preclude actions that would cause ponding on the former surface impoundment area. The deed restrictions were previously reviewed and approved by the Executive Officer.

CEQA AND OTHER CONSIDERATIONS

30. The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code §21000, et seq., and the CEQA guidelines, in accordance with Title 14, CCR, §15301.
31. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."
32. The technical reports required by this Order and the attached "MRP No. R5-2008-0063" are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

33. This order implements:

- a. *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*; and
- b. The prescriptive standards and performance goals of Title 27, California Code of Regulations, effective 18 July 1997, and subsequent revisions.

PROCEDURAL REQUIREMENTS

34. All the above and the supplemental information and details in the attached Information Sheet, incorporated by reference herein, were considered in establishing the following conditions of discharge.
35. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.
36. The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for post closure maintenance of the former surface impoundments, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
37. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
38. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23, CCR. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812, within 30 days of the date of issuance of this Order. Copies of the laws and regulations applicable to the filing of a petition are available on the Internet at http://www.waterboards.ca.gov/water_laws/index.html and will be provided on request.

IT IS HEREBY ORDERED that Order No. 92-154 is rescinded, and pursuant to Sections 13263 and 13267 of the California Water Code that Dole Fresh Vegetables Inc, and Wild Rose Vineyards LLC, their agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of 'hazardous waste' or 'designated waste' at this facility is prohibited. For the purposes of this Order, the terms 'hazardous waste' and 'designated waste' are as defined in Division 2 of Title 27 of the CCR.
2. The discharge of solid waste or liquid waste to surface waters, surface water drainage courses, or groundwater is prohibited.
3. The discharge of waste to these closed waste management units or to portions of these waste management units is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The closed waste management units shall be maintained to prevent inundation or washout due to flooding events with a 100-year return period.
2. Precipitation and drainage control systems shall be designed, constructed and maintained to accommodate the anticipated volume of precipitation and peak flows from surface runoff under 100-year, 24-hour precipitation conditions.
3. Annually, prior to **15 October**, any necessary erosion control measures shall be implemented. Any depressions, potholes, tire tracks, rills or other blemishes in the impoundment area cover that may retain water shall be repaired. If necessary, the impoundment area cover shall be regraded to shed stormwater and the vegetation reestablished. Any other construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the site.
4. Fencing around the closed waste management units shall be maintained.

C. RECEIVING WATER LIMITATIONS

Water Quality Protection Standards

The concentrations of Constituents of Concern in waters passing through the Points of Compliance shall not exceed the Concentration Limits established pursuant to Monitoring and Reporting Program No. R5-2008-0063, which is attached to and made part of this Order by reference.

D. FINANCIAL ASSURANCE

1. The Discharger shall, by **30 April of each year**, submit plans with detailed cost estimates and a demonstration of assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the waste management unit. The Discharger shall provide the assurances of financial responsibility to the Regional Water Board as required by Title 27 CCR, Division 2, Subdivision 1, Chapter 6. The assurances of financial responsibility shall provide that funds for corrective action shall be available to the Regional Water Board upon the issuance of any order under California Water Code, Division 7, Chapter 5. The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.
2. The Discharger shall, by **30 April of each year** submit plans with detailed cost estimates and a demonstration of assurances of financial responsibility to ensure post-closure maintenance of each waste management unit in accordance with its approved post-closure maintenance plan. The Discharger shall provide the assurances of financial responsibility to the Regional Water Board as required by Title 27 CCR, Division 2, Subdivision 1, Chapter 6. The assurances of financial responsibility shall provide that funds for corrective action shall be available to the Regional Water Board upon the issuance of any order under California Water Code, Division 7, Chapter 5. The Discharger shall adjust the cost annually to account for inflation and any changes in facility design, construction, or operation.

E. PROVISIONS

1. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated September 2003, which are hereby incorporated into this Order. The Standard Provisions and Reporting Requirements contain important provisions and requirements with which the Discharger must comply. A violation of any of the Standard Provisions and Reporting Requirements is a violation of these waste discharge requirements.
2. The Discharger shall comply with Monitoring and Reporting Program No. R5-2008-0063, which is attached to and made part of this Order. This compliance includes, but is not limited to, maintenance of waste containment facilities and precipitation and drainage controls and monitoring groundwater throughout the post-closure maintenance period. A violation of Monitoring and Reporting Program No. R5-2008-0063 is a violation of these waste discharge requirements.

3. **By 31 December 2012**, the Discharger shall submit a report evaluating the effectiveness of the surface impoundments closure in achieving reduction of total dissolved solids, chloride and sulfate concentrations in groundwater. If the report demonstrates that closure has been effective in reducing concentrations and that water quality goals will be reached in a reasonable length of time, the Regional Water Board may revise or rescind WDRs for this site. Alternatively, if the report demonstrates that closure has not been effective further corrective actions will be required.
4. The Regional Water Board will review this Order periodically and may revise requirements when necessary.
5. The Discharger must comply with all local permitting requirements.
6. The Discharger must comply with all conditions of this Order including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Water Board or court orders requiring corrective action, imposition of civil monetary liability, or revision or rescission of this Order.
7. All reports and transmittal letters shall be signed by persons identified below:
 - a) For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b) For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c) For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - d) A duly authorized representative of a person designated in a, b or c above if;
 - i) The authorization is made in writing by a person described in a, b, or c of this provision;
 - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a Unit, superintendent, or position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
 - iii) The written authorization is submitted to the Regional Water Board.

- iv) Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

8. In accordance with the California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and stamp of the seal.
9. In the event of any change in control or ownership of the facility, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Regional Water Board, and a statement. The statement shall comply with the signatory paragraph of the Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

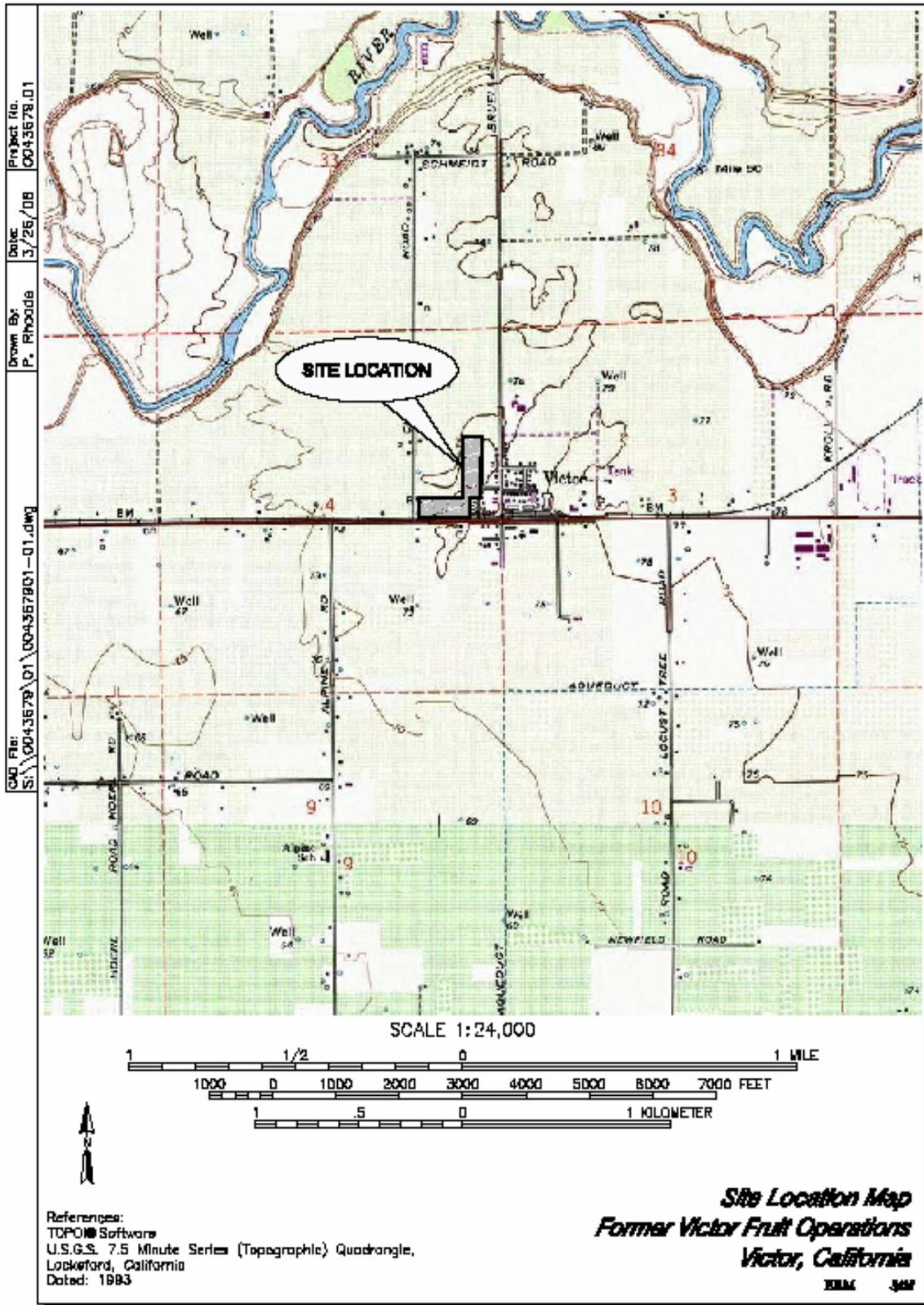
WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2008-0063
WILD ROSE VINEYARDS LLC
DOLE FRESH VEGETABLES INC.
POST CLOSURE OPERATION AND MAINTENANCE
FORMER CLASS II SURFACE IMPOUNDMENTS
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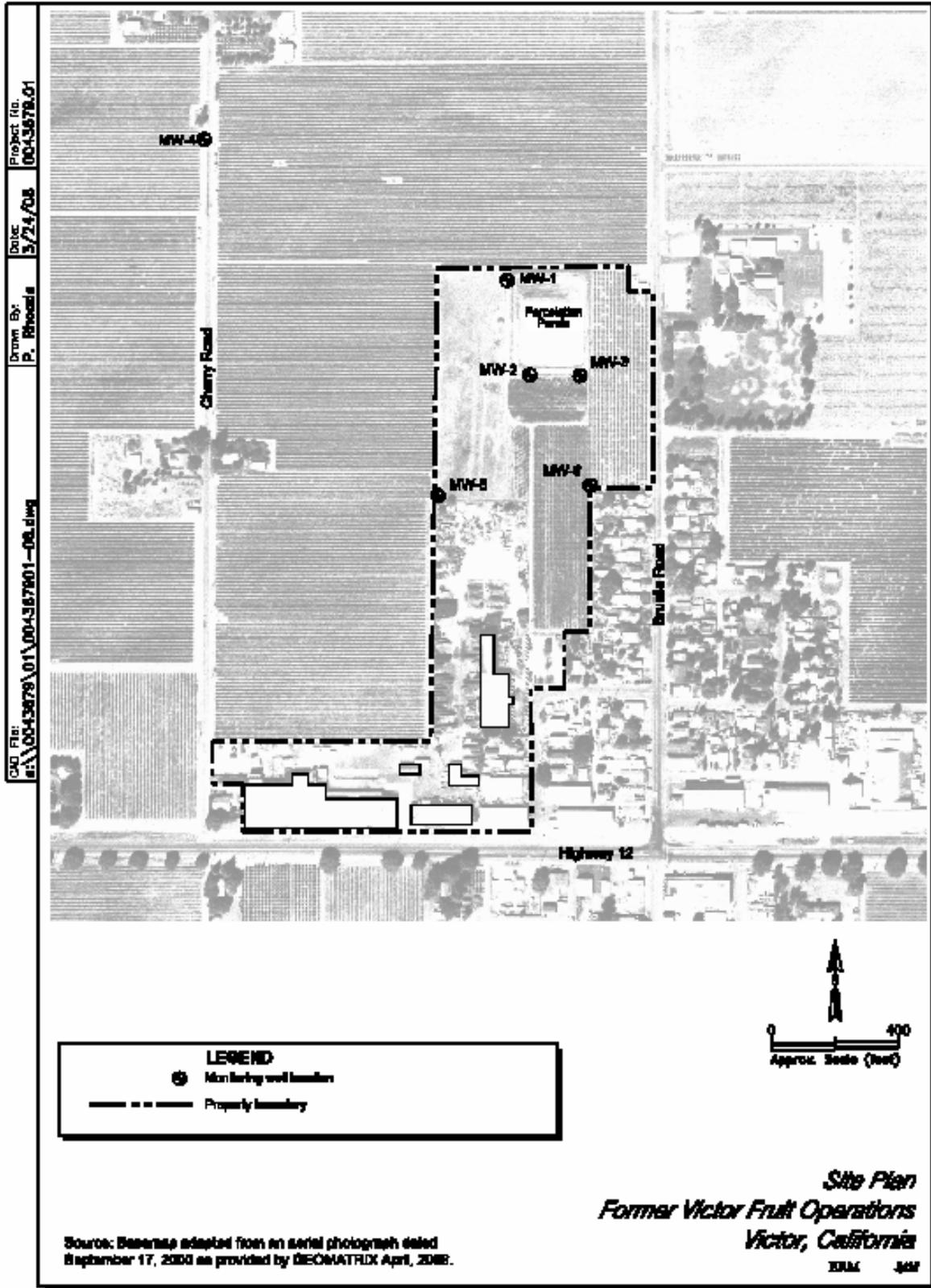
I, Pamela C. Creedon, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 25 April 2008.

PAMELA C. CREEDON, Executive Officer

Attachments



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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
MONITORING AND REPORTING PROGRAM NO. R5-2008-0063
FOR
WILD ROSE VINEYARDS LLC
DOLE FRESH VEGETABLES, INC.
FORMER DOLE FRESH FRUIT/VICTOR FRUIT
POST CLOSURE OPERATION AND MAINTENANCE
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Compliance with this Monitoring and Reporting Program, and with the companion Standard Provisions and Reporting Requirements, is ordered by Waste Discharge Requirements (WDRs) Order No. R5-2008-0063. Failure to comply with this Program, or with the Standard Provisions and Reporting Requirements dated September 2003, constitutes noncompliance with the WDRs and with the Water Code, which can result in the imposition of civil monetary liability.

A. REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program and as required in the Standard Provisions and Reporting Requirements. Reports, which do not comply with the required format, will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with the WDRs. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Historical and current monitoring data shall be graphed at least once annually. Graphs for the same constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data. A short discussion of the monitoring results, including notations of any water quality violations shall precede the tabular summaries. Data shall also be submitted in a digital format acceptable to the Executive Officer.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those, which cannot be quantified and/or specifically identified. Field and laboratory tests shall be reported in the quarterly monitoring reports. The results of any monitoring done more frequently than required at the locations specified herein shall be reported to the Board.

B. REQUIRED MONITORING REPORTS AND SUBMITTAL DATES

1. Semiannual Groundwater Monitoring Reports

All Semiannual-monitoring reports shall include all water quality data and observations collected during the reporting period and submitted per the **Reporting Due Dates** in Section B.6. of this Monitoring and Reporting Program. At a minimum the sampling and data collection in Table 1 of this Monitoring and Reporting Program, Standard Provisions and Reporting Requirements (2003), and Waste Discharge Requirements shall be reported.

2. Annual Monitoring Summary Report

The Discharger shall submit an Annual Monitoring Summary Report covering the previous monitoring year. The annual report shall contain the information specified in Standard Provisions and Reporting Requirements (2003), Section VIII.B. of the “*Reports to be Filed with the Board.*”

3. Response to a Release

If the Discharger determines that there is significant statistical evidence of a release (i.e. the initial statistical comparison or non-statistical comparison indicates, for any Constituent of Concern or Monitoring Parameter, that a release is tentatively identified), the Discharger shall immediately notify the Board verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved, shall provide written notification by certified mail within seven days of such determination and implement Response to Release section of the Standard Provisions and Reporting Requirements (2003).

4. Water Quality Protection Standard Report

Any proposed changes in a statistical method or concentration limits for a constituent of concern or monitoring parameter a Water Quality Protection Standard Report shall be submitted and include the information required in Section C.1. of this Monitoring Reporting Program. Any changes to Water Quality Protection Standards shall be approved by the Executive Officer in a Revised Monitoring and Reporting Program.

5. Submittal Dates

Monitoring Reports

This facility is required to submit semiannual groundwater monitoring reports, annual monitoring summary reports and annual facility monitoring reports. Report submittal dates are summarized below:

Monitoring Reports and Other Report Due Dates	
Semiannual Monitoring Report – Data may be collected on a daily, weekly, monthly, quarterly or semiannually basis.	January to June submit on 31 July July to December submit on 31 January
Annual Monitoring Summary Report	31 January

Monitoring Reports and Other Report Due Dates	
Facility Monitoring Report	15 November or 45 days after any major changes in the facility due to flood, fire, slope failure or other change in site conditions.
Response to a Release (see the Standard Provisions, September 2003)	As necessary
Water Quality Protection Standard Report	As necessary

C. WATER QUALITY PROTECTION STANDARD AND COMPLIANCE PERIOD

1. Water Quality Protection Standard Report

For each waste management unit (Unit), the Water Quality Protection Standard shall consist of all constituents of concern, the concentration limit for each constituent of concern, the point of compliance, and all water quality monitoring points.

The Water Quality Protection Standard for naturally occurring waste constituents consists of the constituents of concern, the concentration limits, and the point of compliance and all monitoring points. The Executive Officer shall review and approve the Water Quality Protection Standard, or any modification thereto, for each monitored medium.

The report shall:

- a. Identify **all distinct bodies of surface and groundwater** that could be affected in the event of a release from a Unit or portion of a Unit. This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.
- b. Include a map showing the monitoring points and background monitoring points for the surface water monitoring program, groundwater monitoring program, and the unsaturated zone monitoring program. The map shall include the point of compliance in accordance with §20405 of Title 27.
- c. Evaluate the perennial direction(s) of groundwater movement within the uppermost groundwater zone(s).

If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the Water Quality Protection Standard.

2. Constituents of Concern

The constituents of concern include all the waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the Unit. The constituents of concern for all Units at the facility are those listed in Tables 1 through 4 for the specified monitored medium.

3. Monitoring Parameters

Monitoring parameters are constituents of concern that are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from a Unit. The monitoring parameters for all Units are those listed in Tables 1 through 5 for the specified monitored medium.

4. Concentration Limits

For a naturally occurring constituent of concern, the concentration limit for each constituent of concern shall be determined as follows:

- a. By calculation in accordance with a statistical method pursuant to §20415 of Title 27; or
- b. By an alternate statistical method acceptable to the Executive Officer in accordance with §20415 of Title 27.

Concentration limits have been previously established for this site and are shown on Table 1.

Table 1 – Concentration Limits

<u>Constituent</u>	<u>Units</u>	<u>Concentration</u>
<u>TDS</u>	mg/L	512
<u>Chloride</u>	mg/L	21
<u>Sulfate</u>	mg/L	62

5. Point of Compliance

The point of compliance for the water standard at each Unit is a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit.

D. MONITORING

The Discharger shall comply with the monitoring program provisions of Title 27 for groundwater in accordance with Monitoring Specifications in Standard Provisions and Reporting Requirements (2003). All monitoring shall be conducted in accordance with a Sample Collection and Analysis Plan, which includes quality assurance/quality control standards, that is acceptable to the Executive Officer.

All point of compliance monitoring wells established for the detection monitoring program shall constitute the monitoring points for the groundwater Water Quality Protection Standard. All detection monitoring program groundwater monitoring wells, unsaturated zone monitoring devices, leachate, and surface water monitoring points shall be sampled and analyzed for monitoring parameters and constituents of concern as indicated and listed in Tables 2 through 5.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those, which cannot be quantified and/or specifically identified. Metals shall be analyzed in accordance with the methods listed in Table 7.

The Discharger may, with the approval of the Executive Officer, use alternative analytical test methods, including new USEPA approved methods, provided the methods have method detection limits equal to or lower than the analytical methods specified in this Monitoring and Reporting Program.

1. Groundwater

Groundwater monitoring points are as follows: upgradient monitor wells MW-1 and -4; point of compliance monitor wells MW-2 and -3; and corrective action monitor wells MW-5 and -6. The Discharger shall operate and maintain the groundwater monitoring system and comply with the applicable provisions of §20415 of Title 27. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the approved Sample Collection and Analysis Plan.

The Discharger shall determine the groundwater flow rate and direction in the uppermost aquifer and in any zones of perched water and in any additional zone of saturation monitored pursuant to this Monitoring and Reporting Program, and report the results semiannually, including the times of highest and lowest elevations of the water levels in the wells.

Hydrographs of each well shall be submitted showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. Hydrographs of each well shall be prepared quarterly and submitted annually.

Groundwater samples shall be collected from the point-of-compliance wells, background wells, and any additional wells added as part of the approved groundwater monitoring system. Samples shall be collected and analyzed for the monitoring parameters in accordance with the methods and frequency specified in Table 2.

Table 2 - Groundwater Monitoring		
<u>Parameters</u>	<u>Units</u>	<u>Frequency</u>
<u>Field Parameter</u>		
Groundwater Elevation	Ft., MSL	Quarterly
Temperature	°C	Semi-Annually
Specific Conductance	µmhos/cm	Semi-Annually
pH	pH number	Semi-Annually
<u>Monitoring Parameters</u>		
Total Dissolved Solids	mg/L	Semi-Annually
Chloride	mg/L	Semi-Annually
Sulfate	mg/L	Semi-Annually

2. Facility Monitoring

a. Facility Inspection

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility. The inspection shall assess damage to the drainage control system, the impoundment area cover, groundwater monitoring equipment (including wells, etc.), and shall include the Standard Observations contained in section F.4.f. of Standard Provisions and Reporting Requirements. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. By **15 November** of each year, the Discharger shall submit an annual report describing the results of the inspection and the repair measures implemented, including photographs of the problem and the repairs.

b. Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities for damage **within 7 days** following *major storm events*. Necessary repairs shall be completed **within 30 days** of the inspection. The Discharger shall report any damage and subsequent repairs within 45 days of completion of the repairs, including photographs of the problem and the repairs.

c. Significant Change in Site Conditions

The Discharger shall **immediately** notify the Board of any flooding, equipment failure, slope failure, or other change in site conditions, which could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures. Subsequent to the notification, the Discharger shall inspect the site for damage and submit a written report with photos **within 7 days**. Necessary repairs shall be completed **within 30 days** of the inspection. The Discharger shall report any damage and subsequent repairs within 45 days of completion of the repairs, including photographs of the problem and the repairs.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

25 April 2008

Date

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STANDARD PROVISIONS AND REPORTING REQUIREMENTS
INDUSTRIAL FACILITIES
For Title 27 (27CCR §20005 et seq.)
September 2003

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES REGULATED BY TITLE 27
(27 CCR §20005 et seq.)
INDUSTRIAL FACILITIES

SEPTEMBER 2003

I. APPLICABILITY

- A. These Standard Provisions and Reporting Requirements are applicable to class II surface impoundments, waste piles, and land treatment units that are regulated pursuant to the provisions of Title 27 of the California Code of Regulations, §20005 et seq. (27 CCR or Title 27).
- B. “Order,” as used throughout this document, means the Waste Discharge Requirements to which these Standard Provisions and Reporting Requirements are incorporated.
- C. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, and do not protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
- D. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
- E. If there is any conflicting or contradictory language between the Waste Discharge Requirements (WDRs), the Monitoring and Reporting Program (MRP), or the Standard Provisions and Reporting Requirements (SPRR), then language in the WDRs shall govern over either the MRP or the SPRR, and language in the MRP shall govern over the SPRR.
- F. Unless otherwise stated, all terms are as defined in §13050 of the California Water Code (CWC) and in §20164 of Title 27.

II. TERMS AND CONDITIONS

- A. Failure to comply with any waste discharge requirement, monitoring and reporting requirement, or Standard Provisions and Reporting Requirement, or other order or prohibition issued, reissued, or amended by the Regional Board or the State Water Resources Control Board, or intentionally or negligently discharging waste, or causing or

permitting waste to be deposited where it is discharged into the waters of the state and creates a condition of pollution or nuisance, is a violation of these waste discharge requirements and the California Water Code, which can result in the imposition of civil monetary liability [CWC §13350(a)]

- B. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to [CWC §13381]:
 - 1. Violation of any term or condition contained in this Order;
 - 2. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - 3. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge; or
 - 4. A material change in the character, location, or volume of discharge.
- C. Before initiating a new discharge or making a material change in the character, location, or volume of an existing discharge, the Discharger shall file a new report of waste discharge, or other appropriate joint technical document, with the Regional Water Quality Control Board (hereafter Board) [CWC §13260(c) and §13264(a)]. A material change includes, but is not limited to, the following:
 - 1. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements;
 - 2. A significant change in disposal method, location, or volume (e.g., change from land disposal to land treatment); or
 - 3. A change in the type of waste being accepted for disposal.
- D. Representatives of the Board may inspect the facilities to ascertain compliance with the waste discharge requirements. The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is refused, with a duly issued warrant. However, in the event of an emergency affecting the public health or safety, an inspection may be made without consent or the issuance of a warrant [CWC §13267(c)].
- E. The Board will review this Order periodically and will revise these waste discharge requirements when necessary [CWC §13263(e) and 27 CCR §21720(b)].
- F. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board [CWC §13267(b)]. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.

- G. A discharge of waste into the waters of the state is a privilege, not a right. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge [CWC §13263(g)].

III. GENERAL PROVISIONS

- A. The discharge shall neither cause nor contribute to the contamination, degradation, or **pollution of ground water** via the release of waste constituents in either liquid or gaseous phase.
- B. The discharge shall neither cause nor contribute to any **surface water pollution**, contamination, or nuisance, including, but not limited to:
1. floating, suspended, or deposited macroscopic particulate matter or foam;
 2. increases in bottom deposits or aquatic growth;
 3. an adverse change in temperature, turbidity, or apparent color beyond natural background levels;
 4. the creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin;
 5. the introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.
- C. The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the waste management unit (WMU) if such waste constituents could migrate to waters of the State—in either the liquid or the gaseous phase—and cause **a condition of contamination, pollution, degradation, or nuisance**.
- D. The discharge shall not cause the release of pollutants, or waste constituents in a manner which could cause a condition of contamination, pollution, degradation, or nuisance to occur, as indicated by the most appropriate statistical or non-statistical data analysis method and retest method listed in the Monitoring and Reporting Program.

- E. The discharger shall take **all reasonable steps to minimize any adverse impact** to the waters of the state resulting from noncompliance with this Order. (“Order,” as used throughout this document, means the Waste Discharge Requirements). Such steps shall include accelerated or additional monitoring as necessary to determine the nature, extent, and impact of the noncompliance.
- F. In the event of any change of ownership or responsibility for construction, operation, closure, or post-closure maintenance of the waste discharge facilities described in this Order, the Discharger shall notify the Board prior to the effective date of the change and shall include a statement by the new Discharger that construction, operation, closure, or post-closure maintenance will be in compliance with this Order and any revisions thereof [27 CCR §21710(c)(1)].
- G. The Discharger shall notify the Board of a material change in; the types, quantity, or concentrations of wastes discharged; site operations and features; or proposed closure procedures, including changes in cost estimates. This notification shall be given a reasonable time before the changes are made or become effective. No changes shall be made without Board approval following authorization for closure pursuant to the site Notification of Closure [27 CCR §21710(a)(4)].
- H. The Discharger shall maintain legible records of the volume and type of each waste discharged at each WMU or portion of a WMU, and the manner and location of discharge. Such records shall be maintained by the Discharger until the beginning of the post-closure maintenance period. These records shall be on forms approved by the State Water Resources Control Board or Regional Board and shall be maintained at the waste management facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the State Water Resources Control Board or Regional Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board [27 CCR §21720(f)].
- I. The discharge of wastes which have the potential to reduce or impair the integrity of containment structures or which, if commingled with other wastes in the WMU, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products, which, in turn:
1. require a higher level of containment than provided by the unit; or
 2. are ‘restricted wastes’; or
 3. impair the integrity of containment structures;
- is prohibited [27 CCR §20200(b)].

IV. FINANCIAL ASSURANCE PROVISIONS

- A. The Discharger shall obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known and reasonably foreseeable releases from the WMU [27 CCR §20380(b) and §22222].
- B. The Discharger shall establish an irrevocable fund for closure and post-closure maintenance to ensure closure and post-closure maintenance of each classified WMU in accordance with an approved closure and post-closure maintenance plan [27 CCR §20950(f) and §22207(a)].

V. DISCHARGE SPECIFICATIONS

- A. The Discharger is responsible for accurate characterization of wastes, including a determination of whether or not wastes will be compatible with containment features and other wastes at the WMU and whether or not the wastes are required to be managed as a hazardous waste [27 CCR §20200(c)] or designated waste [27 CCR §20210].
- B. All WMUs shall be designed, constructed, and operated to ensure that wastes will be a minimum of 5 feet above the highest anticipated elevation of underlying groundwater [27 CCR §20240(c)], including the capillary fringe.
- C. The Discharger shall submit operation plans describing those WMU operations which could affect water quality, including, but not limited to [27 CCR §21760(b)]:
 - 1. A description of proposed treatment, storage, and disposal methods;
 - 2. Contingency plans for the failure or breakdown of waste handling facilities or containment systems, including notice or any such failure, or any detection of waste or leachate in monitoring facilities, to the Board, local governments, and water users downgradient of the WMU(s); and
 - 3. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations and the post-closure maintenance period.
- D. Leachate collected from a WMU shall be discharged to the WMU from which it came, or discharged to an appropriate WMU in accordance with Title 27 and in a manner consistent with the waste classification of the liquid [27 CCR §20200(d) and §20340(g)].

VI. FACILITY SPECIFICATIONS

- A. Surface and subsurface drainage from outside of a WMU shall be diverted from the WMU [27 CCR §20365(e)].
- B. The Discharger shall promptly notify the Board of any slope failure occurring at a WMU. Any failure which threatens the integrity of containment features or the WMU shall be promptly corrected in accordance with an approved method [27 CCR §21710(c)(2)].

VII. CONSTRUCTION SPECIFICATIONS

- A. All containment structures shall be designed by, and construction shall be supervised by, a California registered civil engineer or a certified engineering geologist, and shall be certified by that individual as meeting the prescriptive standards, or approved engineered alternative design, in accordance with this Order prior to waste discharge. WMUs shall receive a final inspection and approval of the construction by Board staff before use of the WMU commences [27 CCR §20310(e)].
- B. Any report, or any amendment or revision of a report, that proposes a design or design change that might affect a WMU's containment features or monitoring systems shall be approved by a registered civil engineer or a certified engineering geologist [27 CCR §21710(d)].
- C. Materials used in containment structures shall have appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of pressure gradients, physical contact with waste or leachate, chemical reactions with soil or rock, climatic conditions, the stress of installation, or because of the stress of daily operations [27 CCR §20320(a)].
- D. WMUs and their respective containment structures shall be designed and constructed to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping [27 CCR §20365(a)].
- E. All WMUs shall be designed to withstand the maximum probable earthquake without damage to the foundation or to the structures that control leachate, or surface drainage, or erosion, or gas [27 CCR §20370(a)].
- F. New WMUs and expansions of existing Class II WMUs shall have a 200 foot setback from any known Holocene fault [27 CCR §20250(d)].
- G. Liners shall be designed and constructed to contain the fluid, including gas, waste, and leachate [27 CCR §20330(a)].

- H. Hydraulic conductivities shall be determined primarily by appropriate field test methods in accordance with accepted civil engineering practice. The results of laboratory tests with both water and leachate, and field tests with water, shall be compared to evaluate how the field permeabilities will be affected by leachate. It is acceptable for the Discharger to use appropriate compaction tests in conjunction with laboratory hydraulic conductivity tests to determine field permeabilities as long as a reasonable number of field hydraulic conductivity tests are also conducted [27 CCR §20320(c)].
- I. Hydraulic conductivities specified for containment structures other than the final cover shall be relative to the fluids (leachate) to be contained. Hydraulic conductivities for the final cover shall be relative to water [27 CCR §20320(b)].
- J. A test pad for each barrier layer and final cover shall be constructed in a manner duplicating the field construction. Test pad construction methods, with the designated equipment, shall be used to determine if the specified density/moisture-content/hydraulic conductivity relationships determined in the laboratory can be achieved in the field with the compaction equipment to be used and at the specified lift thickness [27 CCR §20324(g)(1)(A)].
- K. Performance requirements for geosynthetic membranes shall include, but are not limited to, a need to limit infiltration of water, to the greatest extent possible; a need to control any gas emissions; mechanical compatibility with stresses caused by equipment traffic, and for final covers the result of differential settlement over time and durability throughout the post-closure maintenance period [27 CCR §20324(i)(1)].
- L. Leachate collection and removal systems are required for Class II surface impoundments [27 CCR §20340(a)].
- M. All new WMUs or lateral expansions of existing WMUs that require a leachate collection and removal system shall have a blanket-type leachate collection and removal system that covers the bottom of the WMU and extends as far up the sides as possible. The leachate collection and removal system shall be of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the WMU [27 CCR §20340(e)].
- N. The leachate collection and removal system shall be designed, constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the WMU [27 CCR §20340(b)].
- O. Leachate collection and removal systems shall be designed and operated to function without clogging through the scheduled closure of the WMU and during the post-closure maintenance period. The systems shall be tested at least annually to demonstrate proper operation. The results of the tests shall be

compared with earlier tests made under comparable conditions [27 CCR §20340(d)].

- P. Leachate Collection and Removal Systems shall be designed and constructed to ensure that there is no buildup of hydraulic head on the liner. The depth of fluid in the collection sump shall be kept at the minimum needed to ensure efficient pump operation [27 CCR §20340(c)]
- Q. All construction of liner systems and final cover systems shall be performed in accordance with a Construction Quality Assurance Plan certified by a registered civil engineer or a certified engineering geologist [27 CCR §20323] and approved by the Executive Officer.
- R. The Construction Quality Assurance (CQA) program shall be supervised by a registered civil engineer or a certified engineering geologist who shall be designated the CQA officer [27 CCR §20324(b)(2)].

VIII. REPORTING REQUIREMENTS

A. General Requirements

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall **notify the Board by telephone** at (916) 255-3000 as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time and cause of **noncompliance**, and shall describe the measures being taken to prevent recurrences and shall include a timetable for corrective actions.
2. The Discharger shall **immediately notify the Board** of any **evidence of a release**, or of any flooding, equipment failure, slope failure, or other **change in site conditions** which could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures.
3. The discharger shall **mail a copy of each** monitoring **report** and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11029 Sun Center Drive #200
Rancho Cordova, CA 95670 (or the current address if the office relocates)

4. The discharger shall **retain records of all monitoring information**, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board Executive Officer.

Such records shall show the following for each sample:

- a. Identity of sample and of the Monitoring Point or Background Monitoring Point from which it was taken, along with the identity of the individual who obtained the sample;
- b. Date, time, and manner of sampling;
- c. Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;
- d. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
- e. Calculation of results; and
- f. Results of analyses, and the MDL and PQL for each analysis.

Such records shall also include legible records of the volume and type of each waste discharged at each WMU and the manner and location of discharge. These waste discharge records shall be maintained at the facility until the beginning of the post-closure maintenance period, at which time copies of these records shall be sent to the Board.

5. **All reports and transmittal letters shall be signed** by persons identified below:
 - a. *For a corporation:* by a principal executive officer of at least the level of senior vice-president.
 - b. *For a partnership or sole proprietorship:* by a general partner or the proprietor.
 - c. *For a municipality, state, federal or other public agency:* by either a principal executive officer or ranking elected or appointed official.
 - d. A duly authorized representative of a person designated in a, b or c above if;
 - i. the authorization is made in writing by a person described in a, b, or c of this provision;
 - ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a WMU, superintendent, or position of equivalent

- responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- iii. the written authorization is submitted to the Board.

Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

6. In reporting the monitoring data, the Discharger shall arrange the **data in tabular form** so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or lack thereof.
7. Unless otherwise required in the Monitoring and Reporting Program, monthly **monitoring reports shall be submitted** to the Board by the 15th day of the month following the month in which the samples were taken or observations made, and quarterly, semiannual, and annual monitoring reports shall be submitted to the Board by the 15th day of the month following the calendar quarter in which the samples were taken or observations made.
8. The results of any monitoring done more frequently than required at the locations specified herein shall be reported to the Board.

B. Reports to be Filed with the Board

1. A transmittal **letter** explaining the essential points in each report shall accompany each report. Such a letter shall include a discussion of any violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the Discharger has previously submitted a detailed time schedule for correcting the violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal.

2. Each monitoring report (e.g., Detection Monitoring Report, Constituents of Concern 5-Year Report) shall include a **compliance evaluation summary**. The summary shall contain at least:
 - a. For each monitored ground water body, a description and graphical presentation of the gradient and direction of **ground water flow** under/around the WMU, based upon water level elevations taken during the collection of the water quality data submitted in the report.
 - b. For each monitoring well addressed by the report, a description of the method and time of water level measurement, of the type of pump used for **purg**ing and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, and conductivity during purging, the calibration of the field equipment, results of the pH, temperature, conductivity, and turbidity testing, the well recovery time, and the method of disposing of the purge water).
 - c. For each Monitoring Point and Background Monitoring Point addressed by the report, a description of the type of pump—or other device—used and its placement for **sampling**, and a detailed description of the sampling procedure (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type of containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations).
 - d. For each monitoring well addressed by the report, a description of how the well was **purg**ed to remove all portions of the water that was in the well bore while the sample was being taken.
 - e. A **map or aerial photograph** showing the locations of observation stations, Monitoring Points, and Background Monitoring Points.
 - f. **Laboratory** statements of results of all analyses evaluating compliance with requirements.
 - g. An evaluation of the effectiveness of the leachate monitoring and control facilities, and of the run-off/run-on control facilities.
 - h. A summary and certification of completion of all Standard Observations for the WMU, for the perimeter of the WMU, and for the receiving waters.

- i. The quantity and types of wastes discharged and the locations in the WMU where waste has been placed since submittal of the last such report.
3. The Discharger shall report by telephone concerning any **seepage from the disposal area** immediately after it is discovered. A written report shall be filed with the Board within seven days, containing at least the following information:
 - a. a map showing the location(s) of seepage;
 - b. an estimate of the flow rate;
 - c. a description of the nature of the discharge (e.g., all pertinent observations and analyses); and
 - d. corrective measures underway or proposed, and corresponding time schedule.See **RESPONSE TO A RELEASE** below.
4. The Discharger shall submit an **Annual Monitoring Summary Report** to the Board covering the reporting period previous monitoring year. This report shall contain:
 - a. For each Monitoring Point and Background Monitoring Point, submit in **graphical format** the laboratory analytical data for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents for the period of record for a given Monitoring Point or Background Monitoring Point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. Graphical analysis of monitoring data may be used to provide significant evidence of a release.
 - b. Unless otherwise exempted by the Executive Officer, all monitoring analytical data obtained during the previous two six-month Reporting Periods, presented in tabular form as well as on 3.50" **computer diskettes**, either in MS-DOS/ASCII format or in another file format acceptable to Board staff. Data sets too large to fit on a single 2 MB diskette may be submitted on disk in a commonly available compressed format (e.g. PKZIP or NORTON BACKUP). The Board regards the submittal of data in hard copy and on diskette as "...the form necessary for..." statistical analysis (§20420(h)), in that this facilitates periodic review by the Board's statistical consultant.

- c. A **comprehensive discussion of the compliance record**, and the result of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the waste discharge requirements.
- d. A **map** showing the area and elevations in which filling has been completed during the previous calendar year.
- e. A **written** summary of the monitoring results, indicating any changes made or observed since the previous annual report.
- f. An evaluation of the effectiveness of the leachate monitoring/control facilities.

IX. PROVISIONS FOR MONITORING

A. General

1. The discharger shall maintain a **written sampling and analysis plan** sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling and analysis plan.
2. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and regularly **calibrated** to ensure their continued accuracy.
3. The discharger shall construct or abandon all **monitoring wells** to meet or exceed the standards stated in the State Department of Water Resources Bulletin 74-81 and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.
4. All sample analyses shall be conducted at a **laboratory accredited** for such analyses by the State Department of Health Services. The **Quality Assurance-Quality Control Program** must conform to EPA guidelines (e.g., "Laboratory Documentation Requirements for Data Validation," January 1990, USEPA Region 9) or to procedures approved by the Board.
5. The director **of the laboratory** whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.
6. Unless samples are from water supply wells or unless otherwise specified by Board staff, all ground water samples to be analyzed for **metals** shall be field-filtered. Filtration methods shall minimize the

entrainment of air into the sample (by using, for example, in-line pressure filtration).

B. Sampling and Analytical Methods

1. For any given monitored medium, the samples taken from all monitoring points and background monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span not to exceed 30 days, unless the Executive Officer approves a longer time period, and shall be taken in a manner that ensures sample independence to the greatest extent feasible. Specific methods of collection and analysis must be identified. Sample collection, storage, and analysis shall be performed according to the most recent version of USEPA Methods, such as the latest editions, as applicable, of: (1) Methods for the Analysis of Organics in Water and Wastewater (USEPA 600 Series), (2) Test Methods for Evaluating Solid Waste (SW-846, latest edition), and (3) Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020), and in accordance with the approved Sample Collection and Analysis Plan.
2. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology shall be submitted for review and approval by the Executive Officer prior to use.
3. The **methods of analysis and the detection limits** used must be appropriate for the expected concentrations. For the monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e., “trace” or “ND”) in data from background monitoring points for that medium, the analytical method having the lowest method detection limit (MDL) shall be selected from among those methods which would provide valid results in light of any matrix effects or interferences.
4. **“Trace” results** - results falling between the MDL and the practical quantitation limit (PQL) - shall be reported as such, and shall be accompanied by both the estimated MDL and PQL values for that analytical run.
5. **MDLs and PQLs** shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. In relatively interference-free water, laboratory-derived MDLs and PQLs are expected to closely agree with published USEPA MDLs and PQLs.

6. If the laboratory suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with estimates of the detection limit and quantitation limit actually achieved. **The MDL shall always be calculated such that it represents the lowest achievable concentration associated with a 99% reliability of a nonzero result.** The PQL shall always be calculated such that it represents the lowest constituent concentration at which a numerical value can be assigned with reasonable certainty that it represents the constituent's actual concentration in the sample. Normally, PQLs should be set equal to the concentration of the lowest standard used to calibrate the analytical procedure.
7. Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.
8. All **QA/QC data** shall be reported, along with the sample results to which they apply, including the method, equipment, analytical detection and quantitation limits, the percent recovery, an explanation for any recovery that falls outside the QC limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recoveries. In cases where contaminants are detected in QA/QC samples (i.e., field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.
9. The statistical method shall account for data below the practical quantitation limit (PQL) with one or more statistical procedures that are protective of human health and the environment. Any PQL validated pursuant to §20415(e)(7) of Title 27 that is used in the statistical method shall be **the lowest concentration (or value) that can be reliably achieved** within limits of precision and accuracy specified in the WDRs for routine laboratory operating conditions that are available to the facility. The Discharger's technical report, pursuant to §20415(e)(7) of Title 27, shall consider the PQLs listed in Appendix IX to Chapter 14 of Division 4.5 of Title 22, California Code of Regulations, for guidance when specifying limits of precision and accuracy. For any given constituent monitored at a background or downgradient monitoring point, an indication that falls between the MDL and the PQL for that constituent (hereinafter called a "trace" detection) shall be identified and

used in appropriate statistical or nonstatistical tests. Nevertheless, for a statistical method that is compatible with the proportion of censored data (trace and ND indications) in the data set, the Discharger can use the laboratory's concentration estimates in the trace range (if available) for statistical analysis, in order to increase the statistical power by decreasing the number of "ties".

10. Background for water samples or soil-pore gas samples shall be represented by the data from all samples taken from applicable background monitoring points during that reporting period (at least one sample from each background monitoring point). The Discharger may propose an alternate statistical method [to the methods listed under 27 CCR §20415(e)(8)(A-D)] in accordance with §20415(e)(8)(E) of Title 27, for review and approval by the Executive Officer.
11. The Discharger may propose an alternate statistical method [to the methods listed under 27 CCR §20415(e)(8)(A-D)] in accordance with §20415(e)(8)(E) of Title 27, for review and approval by the Executive Officer. Upon receiving written approval from the Executive Officer, alternate statistical procedures may be used for determining the significance of analytical results for common laboratory contaminants (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate). Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Board staff.
12. The Discharger shall use the following non-statistical method for all analytes that are detected in less than 10% of the background samples. The non-statistical method shall be implemented as follows:
 - a. From the constituent of concern or monitoring parameter list, identify each analyte in the **current** sample that exceeds either its respective MDL or PQL. The Discharger shall conclude that the exceedance provides a preliminary indication of a release or a change in the nature or extent of the release, at that monitoring point, if *either*:
 - i. The data contains two or more analytes that are detected in less than 10% of background samples that equal or exceed their respective MDLs; or
 - ii. The data contains one or more analyte that equals or exceeds its PQL.

- b. **Discrete Retest** [Title 27 CCR Section 20415(e)(8)(E)]:
 - i. In the event that the Discharger concludes (pursuant to paragraph 12.a., above) that there is a preliminary indication of a release, then the Discharger shall immediately notify Regional Board staff by phone or e-mail and, within 30 days of such indication, shall collect two new (retest) samples from the monitoring point where the release is preliminarily indicated.
 - ii. For any given retest sample, the Discharger shall include, in the retest analysis, **only the laboratory analytical results for those analytes detected in the original sample**. As soon as the retest data are available, the Discharger shall conclude that there is measurably significant evidence of a release if two or more analytes equal or exceed their respective MDLs or if one or more analyte equals or exceeds its PQL and shall:
 - a. **Immediately** notify the Regional Board about any constituent or constituents verified to be present at the monitoring point, and follow up with written notification submitted by certified mail **within seven days** of validation; and
 - b. Comply with ¶14, below if any constituent or constituents were verified to be present.
 - iii. Any analyte that triggers a discrete retest per this method shall be added to the monitoring parameter list such that it is monitored during each regular monitoring event.
13. If the Executive Officer determines, after reviewing the submitted report in 12.b. above, that the detected constituent most likely originated from the WMU(s), the Discharger shall **immediately** implement the requirements of X. Response To A Release, C. Release Has Been Verified, contained in the Standard Provisions and Reporting Requirements (September 2003).
14. If the Discharger determines that there is measurably significant evidence of a release from the WMU at any monitoring point, the Discharger shall **immediately** implement the requirements of **X. Response To A Release, C. Release Has Been Verified**, contained in the Standard Provisions and Reporting Requirements.

X. RESPONSE TO A RELEASE

A. Monitoring Point Evidence of a Release

1. If the Discharger determines that there is “measurably significant” evidence of a release from the WMU (i.e. the initial statistical comparison or nonstatistical comparison indicates, for any constituent of concern or monitoring parameter, that a release is tentatively identified), the Discharger shall [27 CCR §20420(j)]:
 - a. **Notification** — **immediately notify Board staff verbally** of the finding and **provide** written notification by certified mail **within seven days** of such determination. The notification shall, for each affected monitoring point, identify the monitoring parameters and constituents of concern that have indicated “measurably significant” evidence of a release from the WMU [27 CCR §20420(j)(1)];
 - b. **Retest Optional** — can immediately initiate the verification (retest) procedure pre-approved by the Board [pursuant to §20415(e)(8)(E) of Title 27] to verify that there is “measurably significant” evidence of a release from the WMU for a parameter or constituent which has indicated a release at a monitoring point [27 CCR §20420(j)(2)]; and
 - c. **Next Step** — immediately following detection of a release [or after completing the retest pursuant to b) above and confirming the existence of a release], shall comply with the requirements of C. (Release Has Been Verified) below [27 CCR §20420(j)(3)].

B. Physical Evidence of a Release

If the Discharger determines that there is a significant **physical** evidence of a release, the Discharger shall notify the Board **by certified mail within 7 days** of such determination, and within 90 days shall submit an amended report of waste discharge to make any appropriate changes to the detection monitoring program [27 CCR §20420(1)(1) & (2)].

C. Release Has Been Verified

1. If the detection was made based upon sampling and analysis for monitoring parameters, **immediately** sample all monitoring points in the affected medium at that WMU and determine the concentration of all constituents of concern. Because this constituent of concern scan does not involve statistical testing, the Discharger need collect and analyze

only a single water sample from each monitoring point in the affected medium [27 CCR §20420(k)(1)].

2. The Discharger, **within 90 days** of determining “measurably significant” evidence of a release, shall submit an amended report of waste discharge to establish an evaluation monitoring program meeting the requirements of §20425 of Title 27 [27 CCR §20420(k)(5)].
3. The Discharger, **within 180 days** of determining “measurably significant” evidence of a release, shall submit to the Board an initial engineering feasibility study for a corrective action program necessary to meet the requirements of §20430 of Title 27. At a minimum, the engineering feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern [27 CCR §20420(k)(6)].
4. If the Discharger determines that there is “measurably significant” evidence of a release from the WMU at any monitoring point, the Discharger may demonstrate that a source other than the WMU caused the evidence of a release or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation or by natural variation in groundwater, surface water, or the unsaturated zone. The Discharger may make a demonstration pursuant to §20420(k)(7) of Title 27 in addition to or in lieu of submitting both an amended report of waste discharge or an engineering feasibility study; however, the Discharger is not relieved of the requirements of §20420(k)(6) & (7) of Title 27 unless the demonstration successfully shows that a source other than the WMU caused the evidence of a release or that the evidence resulted from error in sampling, analysis, or statistical evaluation or from natural variation in groundwater, surface water, or the unsaturated zone. In making this demonstration, the Discharger shall notify the Board by certified mail of the intent to make the demonstration **within seven days** of determining “measurably significant” evidence of a release. The report shall be submitted to the Board **within 90 days** of determining “measurably significant” evidence of a release demonstrating that a source other than the WMU caused the evidence [27 CCR §20420(k)(7)].
5. The Discharger, **within 90 days** of establishing an Evaluation Monitoring Program, shall conduct an evaluation monitoring program used to assess the nature and extent of the release from the WMU and to design a corrective action program meeting the requirements of §20430 of Title 27. At a minimum, an evaluation monitoring program for a WMU shall include:

- a. An assessment of the nature and extent of the release from the WMU. This assessment shall include a determination of the special distribution and concentration of each constituent of concern throughout the zone affected by the release. The Discharger shall submit this assessment to the Board **within 90 days** of establishing an evaluation monitoring program [27 CCR §20425(b)].
- b. Update the initial engineering feasibility study for corrective action based on the data collected to delineate the release and from the ongoing monitoring program. The Discharger shall submit this updated engineering feasibility study to the Board **within 90 days** of establishing an evaluation monitoring program [27 CCR §20425(c)].
- c. Submit an amended report of waste discharge to establish a corrective action program meeting the requirements of §20430 of Title 27 based on the data collected to delineate the release and on the updated engineering feasibility study. The Discharger shall submit this report to the Board **within 90 days** of establishing an evaluation monitoring program [27 CCR §20425(d)].

D. Release Beyond Facility Boundary

1. Any time the discharger concludes that a release from the WMU has proceeded beyond the facility boundary, the discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).
2. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the discharger's current knowledge of the nature and extent of the release.
3. Subsequent to initial notification, the discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
4. Each time the discharger sends a notification to Affected Persons, the discharger shall provide the Board, within seven days of sending such notification, with both a copy of the notification and a current mailing list of Affected Persons.

XI. STANDARD CONDITIONS

A. Supervision and Certification

1. All WMUs shall be **designed and constructed** under the direct supervision of a California registered civil engineer or a certified engineering geologist and shall be certified by that individual as meeting the prescriptive standards, or approved engineered alternative design, and performance goals of Title 27 prior to waste discharge.
2. Designs of WMUs shall include a **Construction Quality Assurance Plan**, which shall:
 - a. be submitted for review and approval by the Board prior to construction;
 - b. demonstrate that the WMU has been constructed according to the specifications and plans as approved by the Board; and
 - c. provide quality control on the materials and construction practices used to construct the WMU and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.
3. **Closure** of each WMU shall be performed under the direct supervision of a California registered civil engineer or California certified engineering geologist.

B. Operations

1. The discharger shall maintain in **good working order** and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
2. For any **electrically** operated equipment at the site, the **failure** of which could cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
3. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be regarded as a defense for the discharger's violations of the Order.
4. The discharge shall remain within the designated disposal area at all times.

5. By the effective date of waste discharge requirements, the discharger shall have a plan for preventing and controlling **accidental discharges**, and for minimizing the effect of such events. This plan shall:
 - a. Identify the possible sources of accidental loss or leakage of wastes from each waste storage, treatment, or disposal unit.
 - b. Evaluate the effectiveness of present WMUs and operational procedures, and identify needed changes or contingency plans.
 - c. Predict the effectiveness of the proposed changes in waste management facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakage and minimize its effects.

6. WMU **gases** shall be adequately vented, removed from WMU, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone.
7. Any direct-line discharge to a surface impoundment shall have fail-safe equipment or operating procedures to prevent overfilling.
8. Surface impoundments shall be designed, constructed and maintained to prevent scouring and/or erosion of the liners and other containment features at points of discharge to the impoundments and by wave action at the waterline.
9. Leachate removed from a surface impoundment LCRS shall be discharged to the impoundment from which it originated.
10. Solids which accumulate in a surface impoundment shall be periodically removed to maintain minimum freeboard requirements and to maintain sufficient capacity for the surface impoundment leachate and for the discharge of wastes. Prior to removal of these solids, sufficient samples shall be taken for their characterization and classification pursuant to Article 2, Subchapter 2 of Title 27. The rationale for the sampling protocol used, the results of this sampling, and a rationale for classification of the solids shall be submitted to the Board for review. The solids may be discharged to the Class III landfill units only if the Board determines that they qualify for classification as “nonhazardous solid waste” or “inert waste.”
11. Water used for facility maintenance shall be limited to the minimum amount necessary for dust control.

C. Siting

1. WMUs shall be designed, constructed, and operated to prevent inundation or washout due to floods with a 100-year return period.

Class II surface impoundments and related containment structures shall be constructed and maintained to prevent, to the greatest extent possible, inundation, erosion, slope failure, washout, and overtopping under 1000-year, 24-hour precipitation conditions, and shall be designed to contain the 100-year wet season precipitation without using the required two feet of freeboard.

2. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes, and shall either be contained on-site or be discharged in accordance with applicable storm water regulations.

D. Closure

1. Closed WMUs shall be provided with at least two **permanent monuments**, installed by a licensed land surveyor or by a registered civil engineer authorized to perform land surveying, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period.
2. Areas with **slopes greater than ten percent**, surface drainage courses, and areas subject to erosion by wind or water shall be designed and constructed to prevent such erosion.

E. Post-Closure

1. The post-closure maintenance period shall continue until the Board determines that remaining wastes in all WMUs will not threaten water quality.
2. The owner of the waste management facility shall have the continuing responsibility to assure protection of usable waters from discharged wastes and from gases and leachate generated by discharged waste during the active life, closure, and post-closure maintenance period of the WMUs and during subsequent use of the property for other purposes.

XII. DEFINITIONS

Unless otherwise stated, all terms are as defined in Chapter 2, Division 7, of the California Water Code (Section 13050 et seq.), in Article 2, Chapter 2, Division 2, Title 27 of the California Code of Regulations (27 CCR §20005 et seq.), and in Section 258.2, and elsewhere in Part 258, Title 40 of the Code of Federal Regulations.

The following additional definitions apply to the Order:

- A. “**Affected Persons**” means all individuals who either own or occupy land outside the boundaries of the parcel upon which the WMU is located that has been or may be affected by the **release** of leachate or waste constituents (in gas or liquid phase) from a WMU.
- B. “**Background Monitoring Point**” means a device (e.g., well) or location (e.g., a specific point along a lakeshore), upgradient or sidegradient from the WMU, or as otherwise approved by the Executive Officer, where water quality samples are taken that are not affected by any release from the WMU and that are used as a basis of comparison against samples taken from downgradient Monitoring Points.
- C. “**Composite liner**” means a liner that consists of two or more components, which include a Synthetic Liner in direct and uniform contact with an underlying layer of prepared, low-permeability soil such that the net permeability of the resulting combination is significantly less than would be expected by reference to the permeability of the individual components layers.
- D. Unless otherwise specified, “**composite sample**” means a combination of individual samples either collected over a specified sampling period or collected over an area at one time (synoptically):
 - 1. at equal time intervals,
 - 2. at varying time intervals so that each sample represents an equal portion of the media to be sampled.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results. “**Constituents of Concern (COC)**” means those constituents which are likely to be in the waste in the WMU or which are likely to be derived from waste constituents in the event of a release.

- E. “**Daily maximum concentration**” means the highest measurement made on any single discrete sample or composite sample.
- F. “**Grab sample**” means a discrete sample collected in less than 15 minutes.

- G. **“Matrix effect”** means any change in the method detection limit or practical quantitation limit for a given analyte as a result of the presence of other constituents - either of natural origin or introduced **by** humans as a result of a release or spill - that are present in the sample of water or soil-pore gas being analyzed.
- H. **“Method detection limit (MDL)”** means the lowest constituent concentration associated with a 99% reliability of a “non-zero” analytical result. The MDL shall reflect the detection capabilities of the specific analytical procedure and equipment used by the laboratory. MDLs reported by the laboratory shall not simply be restated from USEPA analytical method manuals. In relatively interference-free water, laboratory-derived MDLs are expected to closely agree with published USEPA MDLs. If the lab suspects that, due to matrix or other effects, the detection limit for a particular analytical run differs significantly from the laboratory-derived MDL, the results should be flagged accordingly, along with an estimate of the detection limit achieved.
- I. **“Monitoring Parameters”** means the short list of constituents and parameters used for the majority of monitoring activity at a given WMU. Monitoring for the short list of Monitoring Parameters constitutes “indirect monitoring,” in that the results are used to indicate indirectly the success or failure of adequate containment for the longer list of Constituents of Concern.
- J. **“Monitored Media”** means those water-, solid-, or gas-bearing media that are monitored pursuant to the Monitoring and Reporting Program. The Monitored Media may include:
1. Ground water in the uppermost aquifer, in any other portion of the zone of saturation in which it would be reasonable to anticipate that waste constituents migrating from the WMU could be detected, and in any perched zones underlying the WMU,
 2. Any bodies of surface water that could be measurably affected by a release,
 3. Soil pore liquid beneath and/or adjacent to the WMU, and
 4. Soil pore gas beneath and/or adjacent to the WMU.
- K. **“Monitoring Point”** means a device (e.g., well) or location (e.g., a specific point along a lakeshore), downgradient from the WMU and that is assigned in this Order, at which samples are collected for the purpose of detecting a release by comparison with samples collected at Background Monitoring Points.
- L. **“Monthly average concentration”** means the arithmetic mean of measurements made during the month.

- M. **“Monthly average discharge”** means the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging (e.g. gallons per day, cubic feet per day).

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges divided by the number of days during the month when the measurements were made.

- N. **“Order,”** as used throughout this document, means the Waste Discharge Requirements. The Monitoring and Reporting Program and Standard Provisions and Reporting Requirements are incorporated by reference into the Waste Discharge Requirements.

- O. **“Practical quantitation limit (PQL)”** means the lowest constituent concentration at which a numerical concentration can be assigned with reasonable certainty that its value represents the constituent’s actual concentration in the sample. Normally PQLs should be set equal to the concentration of the lowest standard used to calibrate the analytical procedure. The PQL shall reflect the quantitation capabilities of the specific analytical procedure and equipment used by the laboratory. PQLs reported by the laboratory shall not simply be restated from U.S. EPA analytical method manuals. In relatively interference-free water, laboratory-derived PQLs are expected to closely agree with published U. S. EPA PQLs. If the lab suspects that, due to matrix or other effects, the quantitation limit for a particular analytical run differs significantly from the laboratory-derived PQL, the results should be flagged accordingly, along with an estimate of the quantitation limit achieved.

- P. **“Reporting Period”** means the time interval during which samples are collected and analyzed, and the results then reported to the Board, to comply with a specified monitoring and reporting frequency. The maximum reporting period for analysis of all Constituents of Concern is five years; for Monitoring Parameters it is six months (generally, Spring/Summer = April 1 to September 30, and Fall/Winter = October 1 to March 31). The Reporting Period for the Annual Summary Report extends from April 1 of the previous year to March 31 of the current year. The due date for the submittal of any given report will be 15 days after the end of its Reporting Period, unless otherwise stated.

- Q. **“Receiving Waters”** refers to any surface or ground water which actually or potentially receives waste constituents, leachate, or surface or ground waters which come in contact with waste materials or contaminated soils.

- R. **“Sample size”:**

1. For Monitoring Points, means the number of data points obtained from a given Monitoring Point during a given Reporting Period used for

carrying out the statistical or non-statistical analysis of a given analyte during a given Reporting Period; or

2. For Background Monitoring Points, means the number of new and existing data points collected under §20415(e)(11 and 12) from all applicable Background Monitoring Points in a given monitored medium—used to collectively represent the background concentration and variability of a given analyte in carrying out statistical or non-statistical analysis of that analyte during a given Reporting Period.

S. “Standard Observations” means:

1. For Receiving Waters:
 - a. Floating and suspended materials of waste origin: presence or absence, source, and size of affected area;
 - b. Discoloration and turbidity: description of color, source, and size of affected area;
 - c. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;
 - d. Evidence of water uses: presence of water-associated wildlife;
 - e. Flow rate; and
 - f. Weather conditions: wind direction and estimated velocity, total precipitation during recent days and on the day of observation;
2. Along the perimeter of the WMU:
 - a. Evidence of liquid leaving or entering the WMU, estimated size of affected area, and flow rate (show affected area on map);
 - b. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and
 - c. Evidence of erosion and/or of daylighted refuse.
3. For the WMU:
 - a. Evidence of ponded water at any point on the waste management facility (show affected area on map);
 - b. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;
 - c. Evidence of erosion and/or of daylighted refuse; and

T. “Standard Analysis and Measurements” means:

1. Turbidity, in NTU;
2. Water elevation to the nearest 1/100th foot above mean sea level; and

3. Sampling and statistical/non-statistical analysis of the Monitoring Parameters.
 - U. “**Synthetic Liner**” means a layer of flexible, man-made material that is installed in accordance with the standard of the industry over an area of land prior to the discharge of waste there.
 - V. “**VOC_{water}**” (Volatile Organics Monitoring Parameter for Water) means the composite monitoring parameter encompassing all VOCs that are detectable in less than ten percent of applicable background samples from a monitored water-bearing medium (e.g., the unsaturated zone, the uppermost aquifer, a zone of perched ground water, or a surface water body). This parameter is analyzed via the non-statistical analytical method described elsewhere in this Order to identify a release to waters of the state of VOCs whose presence in background water is detected too infrequently to allow statistical analysis.
 - W. “**VOC_{spg}**” (Volatile Organics Monitoring Parameter for Soil Pore Gas) means Monitoring Parameters addressing all volatile organic constituents detectable in a sample of soil pore gas.
 - X. “**Volatile organic constituents (VOCs)**” means the suite of organic constituents having a high vapor pressure. The term includes at least the 47 organic constituents listed in Appendix I to 40 CFR Part 258.

INFORMATION SHEET

ORDER NO. R5-2008-0063
WASTE DISCHARGE REQUIREMENTS
WILD ROSE VINEYARDS LLC
DOLE FRESH VEGETABLES INC.
POST CLOSURE OPERATION AND MAINTENANCE
FORMER CLASS II SURFACE IMPOUNDMENT
SAN JOAQUIN, COUNTY

Dole Fresh Vegetables, Inc is the previous owner and operator and Wild Rose Vineyards LLC is the current landowner of the former Dole Fresh Fruit/Victor Fruit facility in Victor. The facility contains six closed evaporation/percolation wastewater ponds. Because it was infeasible to remove all the waste, these ponds were closed as a landfill. These Waste Discharge Requirements establish post-closure maintenance requirements for the closed landfill.

The Dole Fresh Fruit/Victor Fruit facility operated as a cherry processor and discharged 21,000 gpd of wash water and brine solution to six unlined wastewater ponds. Discharges to the ponds polluted underlying soils with up to 3,400 mg/kg sulfate and 500 mg/kg chloride. Groundwater was impacted with up to 2,400 mg/l TDS, 690 mg/l sulfate and 330 mg/l chloride. The Discharger determined that it would be infeasible to remove all the impacted soil. Therefore, the pond solids were removed and up to four feet of the most polluted soils. Because waste remained in place below the excavation the ponds were closed as a landfill. This was done by filling the excavation with clean fill to grade; the surface was graded to drain; and a vegetative cover was installed. A deed restriction has been placed on the parcel stating that the site has been used as a containment facility; wastes with designated waste characteristics have been discharged at the site; use options for the parcel are restricted; and such restrictions shall not be lifted without written permission of the Regional Water Board.

RDA; 25 April 2008